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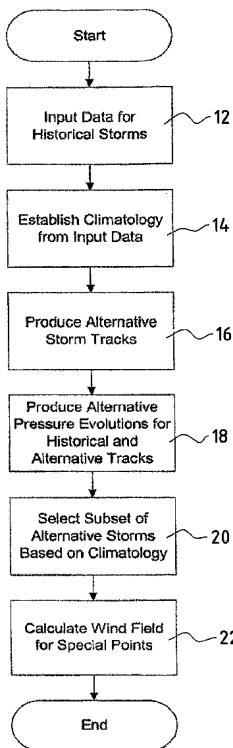
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(54) Title: METHOD AND SYSTEM FOR AUTOMATED LOCATION DEPENDENT PROBABILISTIC TROPICAL CYCLONE FORECAST



(57) **Abstract:** The invention relates to a method for automated location dependent probabilistic tropical cyclone forecast, whereas a plurality of new data records representative of alternative tracks are generated based of historical tracks by means of a first MonteCarlo-module, wherein points of the new data records are generated from said points along the historical track by a dependent sampling process, whereas a intensity climatology is generated, based upon the intensity data associated with at least some of the plurality of points along the historical tracks located within a certain grid cell, whereas now intensity data are generated by means of a second MonteCarlo-module, wherein the new intensity data are generated from the intensity data associated with at least some of the plurality of points along the historical tracks by a MonteCarlo sampling process, whereas the distribution of the historical tracks are reproduced by a filtering module within the new or accumulated data records, and whereas a wind field of each data record is generated and a probability is assigned by a interpolation-module to each point in said grid, giving the probability of the occurrence of a specific wind strength at a given geographical location and time.

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